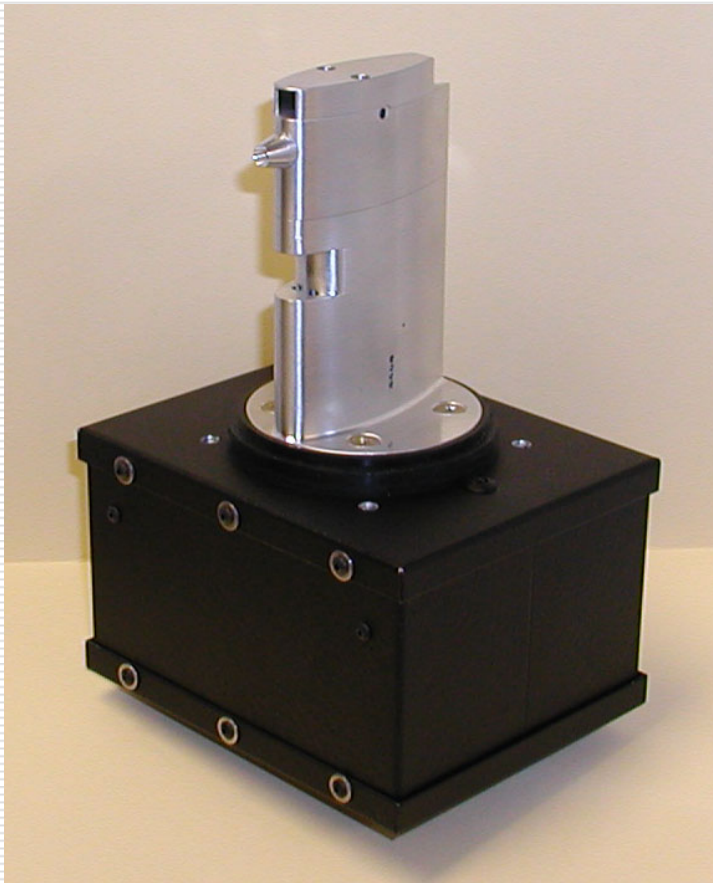


TAMDAR Status FPAW Forum

November 11, 2005

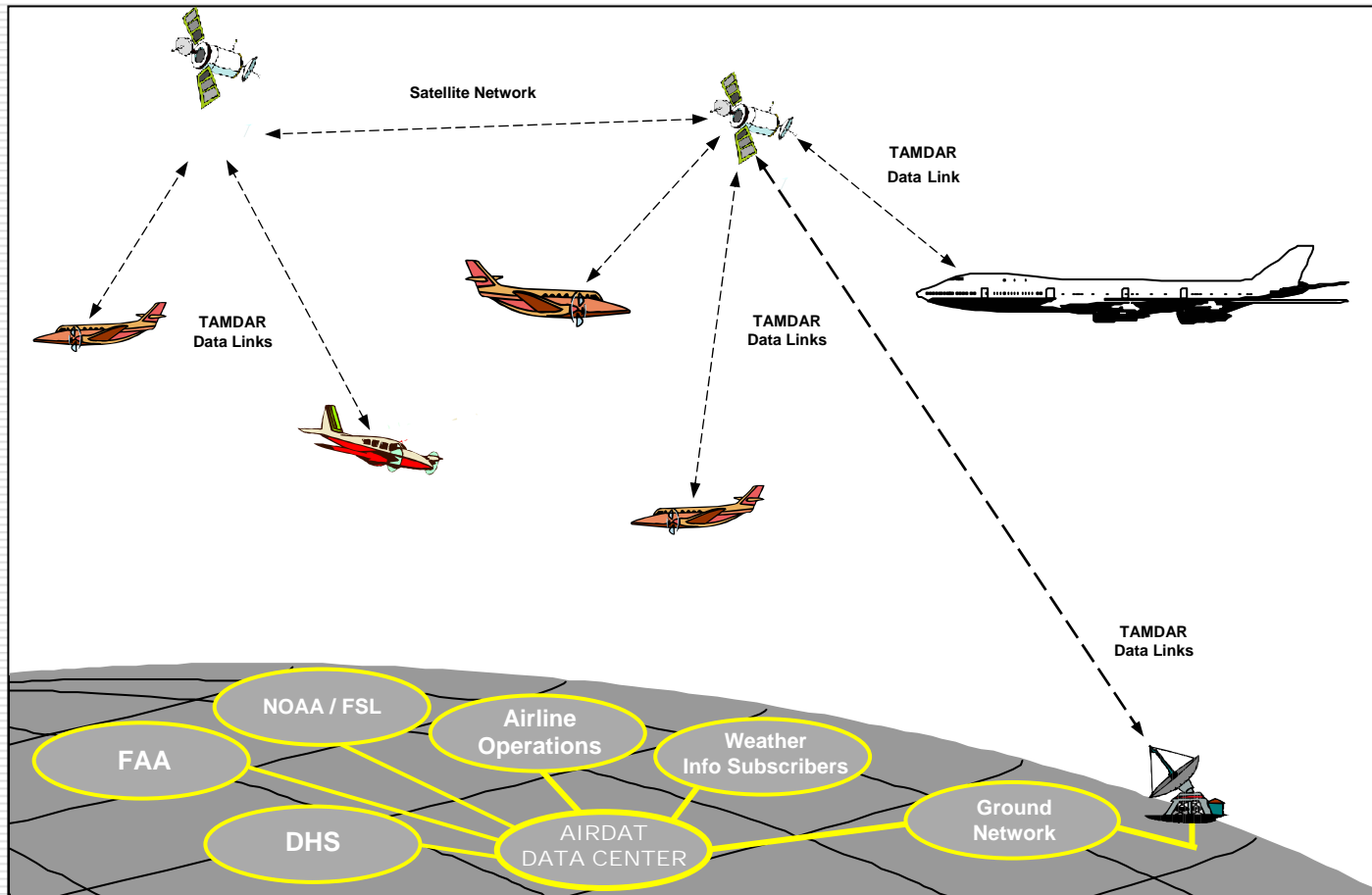
The patented TAMDAR sensor



Measures and derives:

- Ice presence
 - Median and peak turbulence
 - Winds aloft
 - Indicated and true airspeed
 - Static pressure and pressure altitude
 - Air temperature (Mach corrected)
 - Relative humidity
 - GPS lat/long/alt/time
-

System architecture



Who is AirDat?



AirDat's IP and capabilities:

- Developed patented TAMDAR sensor with NASA
 - Implemented an integrated global (near) real-time data link
 - Deployment and manufacturing of TAMDAR sensors
 - Dedicated 24/7 data center
 - Real-time data quality control
 - Near real-time data collection, processing, QA, and distribution
 - Creation and distribution of enhanced weather and communications products and services
-

GLFE status



- Field evaluation over Great Lakes and south
 - All 63 Mesaba Saab 340 equipped
 - All 63 aircraft delivering quality data
 - Significant improvements in forecasts seen
 - GLFE has been extended to Jan. 15, 2006
-

Deployment status and plans



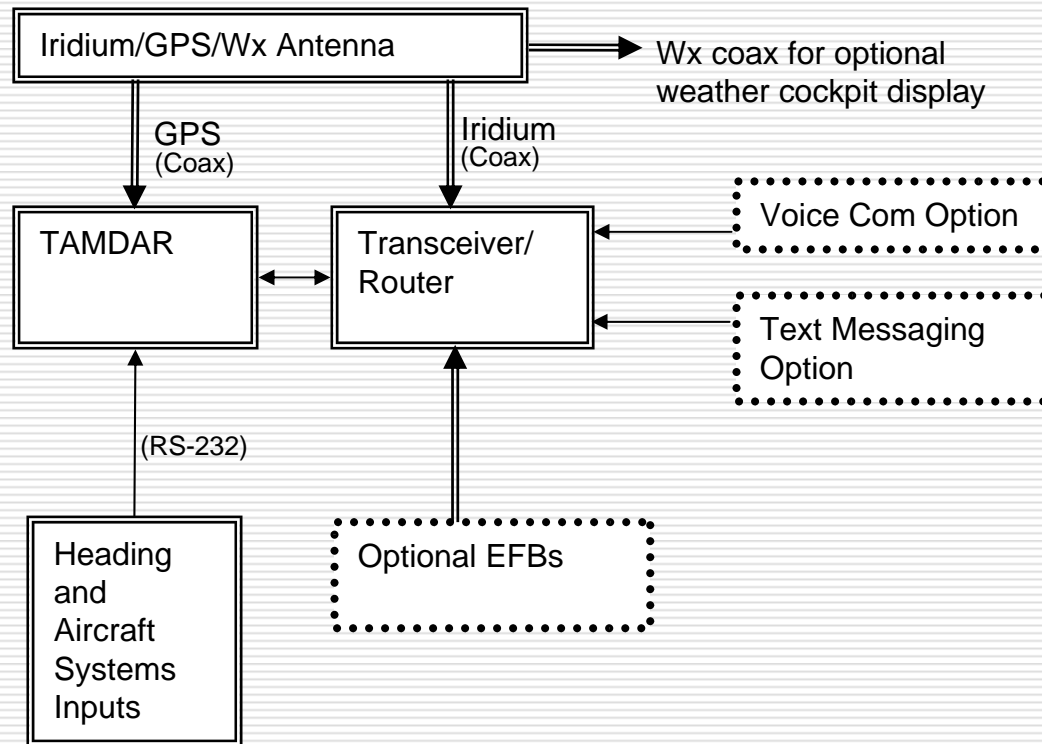
- Deployment on 63 Mesaba aircraft complete
 - Contractual agreements close with four additional regional carriers
 - Approx. 550-600 aircraft (including Mesaba)
 - Approx. 350 airports served
 - Coverage over most of North America
 - Many small airports without alternative sounding data
 - Deployments will occur in 2006
-

TAMDAR Data Volume and Simulation



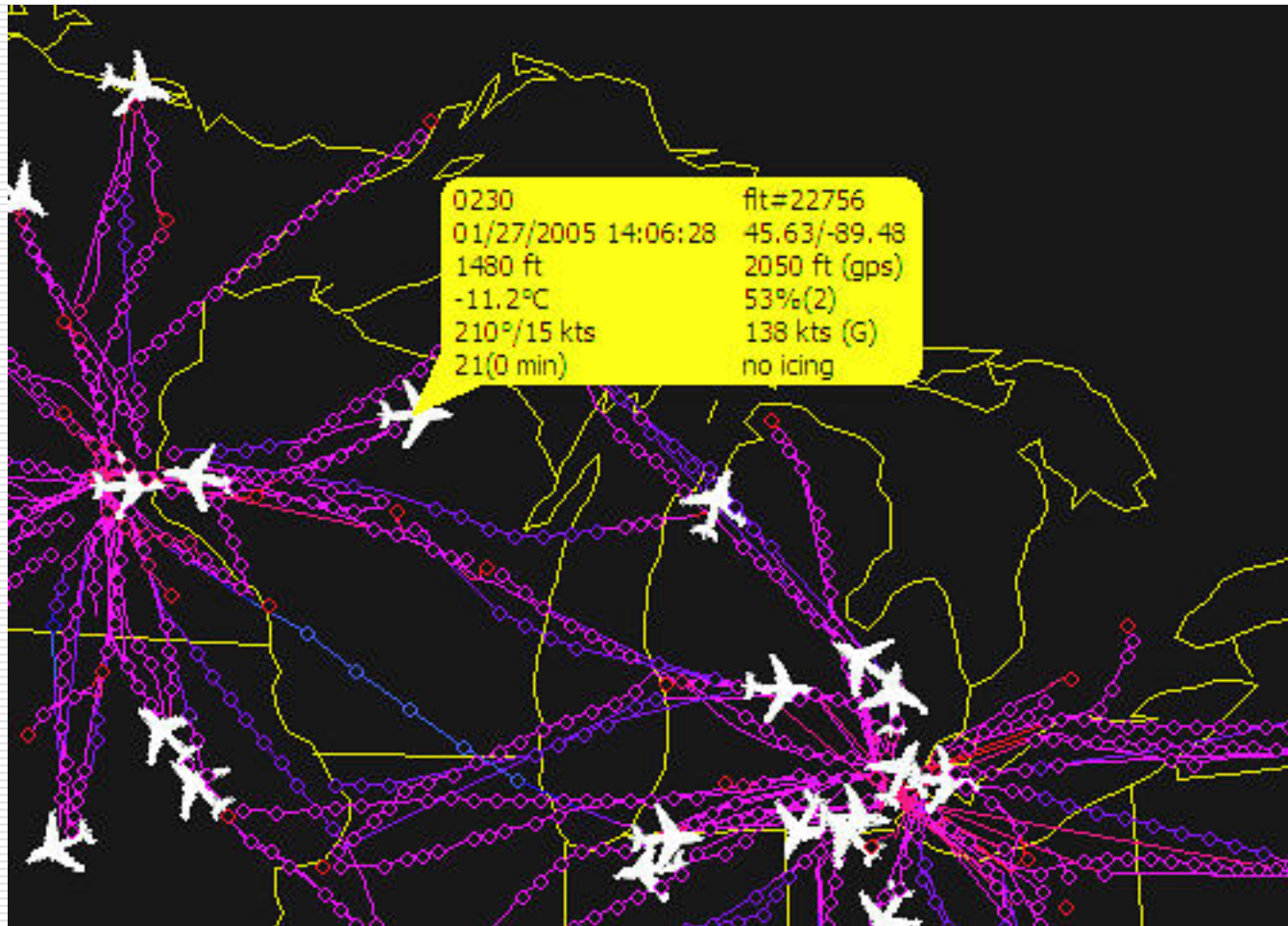
- Radiosonde soundings (daily): 138
 - 69 sites
 - 2 launches per day
 - Mesaba (GLFE) soundings: 820
 - 79 sites (airports)
 - CONUS deployment (500+ aircraft) soundings: 5000+
 - 300+ sites (airports)
 - Simulation—illustrates potential impact
-

TAMDAR airborne components

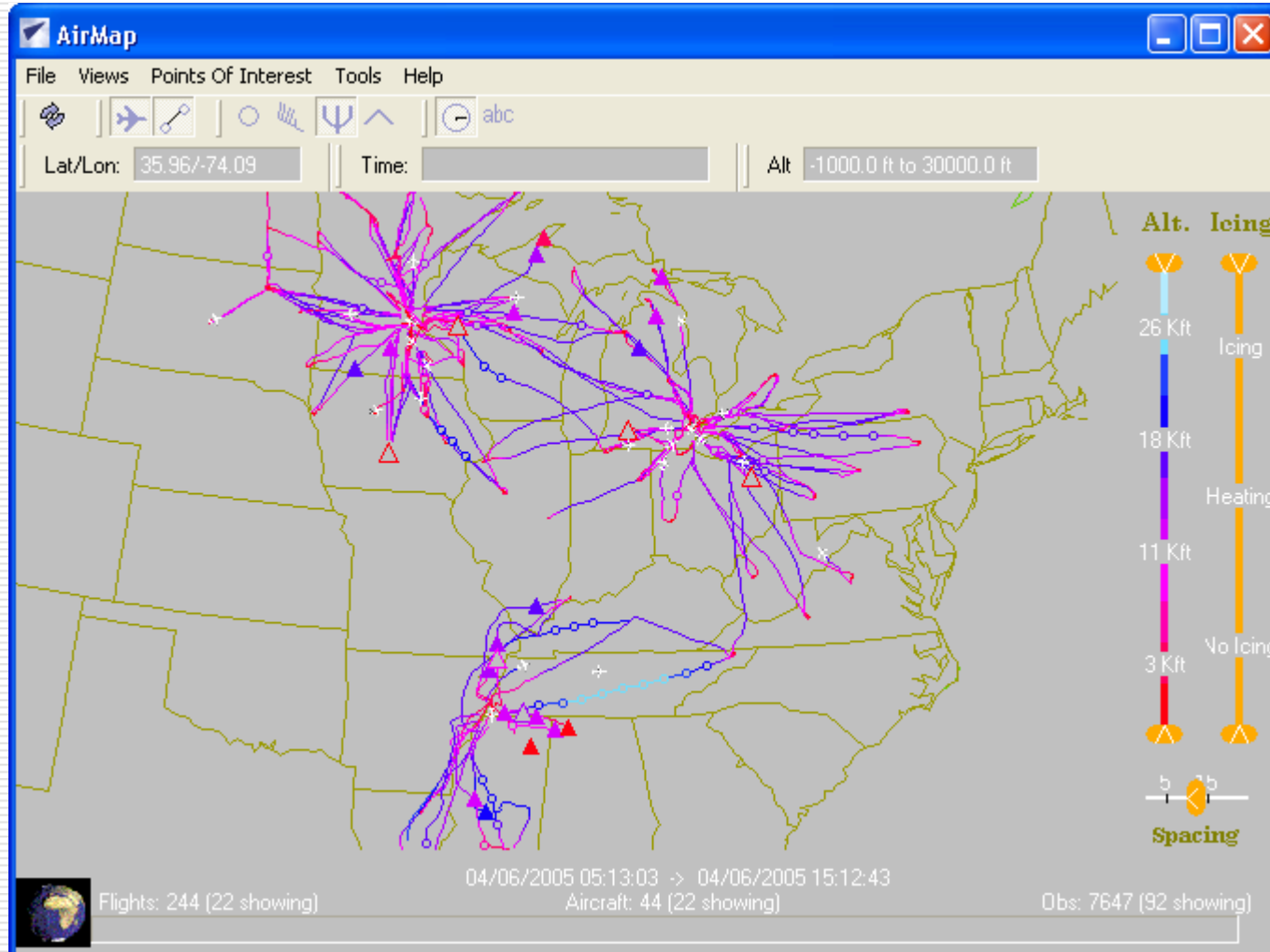


Note: Integrated antenna includes satellite weather reception

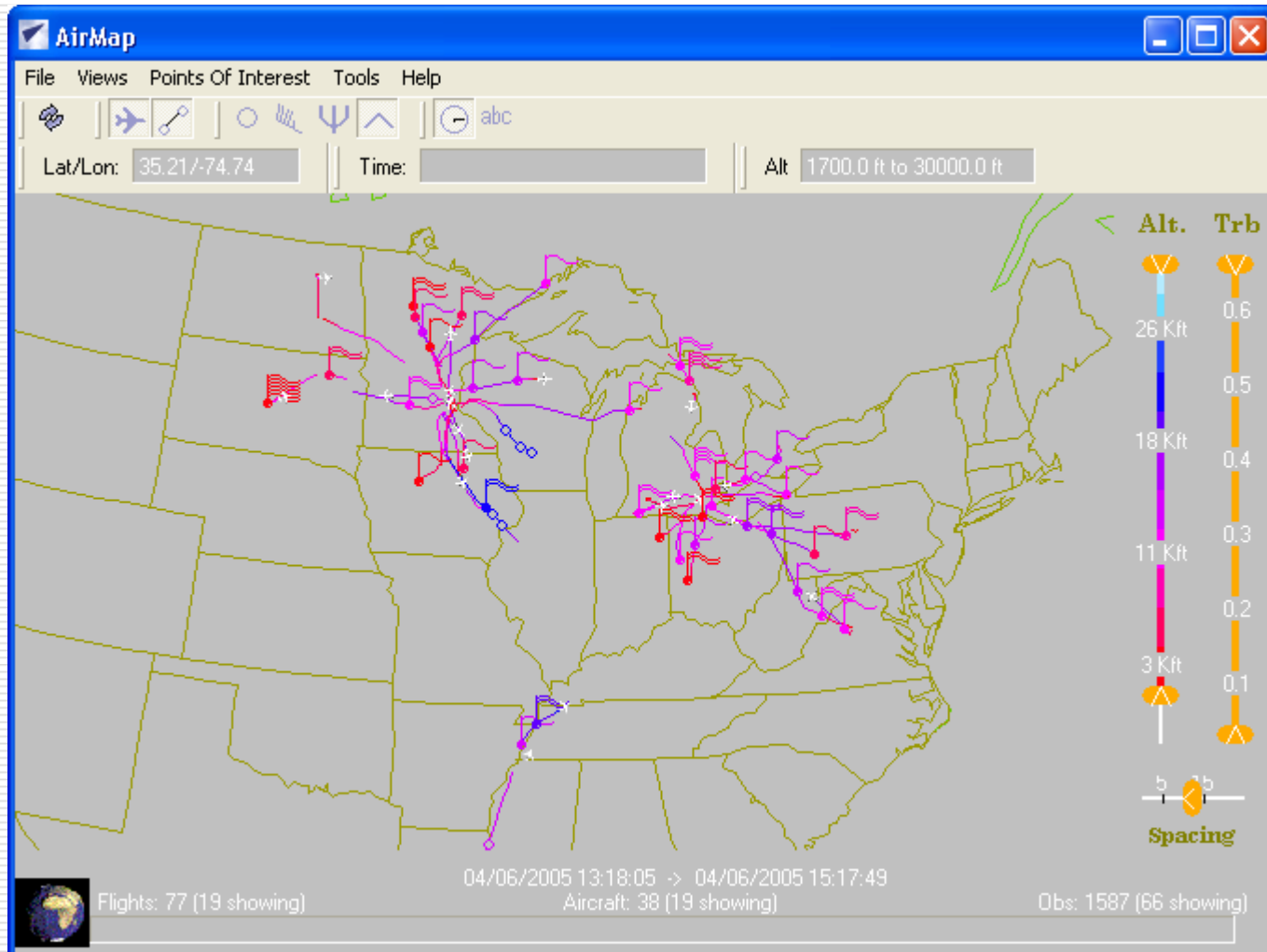
TAMDAR[®] observation



Icing map display



Turbulence map display



TAMDAR based aviation products and services



- Aircraft tracking
 - Real time icing and turbulence data
 - In-situ winds aloft
 - Improved icing and turbulence models
 - Improved convective models and forecasting
 - Improved precipitation forecasts
 - Improved TAFs
 - Improved, high density atmospheric sounds
 - Equipage with antenna for cockpit weather service
-

**I would starve if more
pilots viewed TAMDAR icing
& turbulence data!**

